


Doc Code: AP.PRE.REQ

DEC 30 2005

PTO/SB/33 (07-05)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) NL 000332	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on _____ Signature _____ Typed or printed name _____		Application Number 09/885,707	Filed June 20, 2001
		First Named Inventor Arnoldus Werner Johannes Oomen	
		Art Unit 2655	Examiner Michael N. Opsasnick
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) <input type="checkbox"/> attorney or agent of record. Registration number _____ <input checked="" type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 41,541		Signature  Terry Kramer Typed or printed name 703-519-9801 Telephone number December 30, 2005 Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Arnoldus Werner Johannes Oomen
For : SINUSOIDAL CODING
Serial No.: : 09/885,707
Filed : June 20, 2001
Art Unit : 2655
Examiner : Michael N. Opsasnick
Att. Docket : NL 000332
Confirmation No. : 4224

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REMARKS

This is in response to the Final Office Action dated November 16, 2005.

MAIN REJECTION UNDER 35 U.S.C. § 103

Claims 1, 5, 6, 7, and 9, are independent claims. For purposes of this pre-appeal brief request, claim 1 is representative.

Claims 1-11 stand rejected under 35 U.S.C. § 103(a) as being obvious over Gersho et al., U.S. Patent No. 6,475,245 in view of McAulay et al., U.S. Patent No. 5,054,072.

The primary reference to Gersho et al. relates to a method and apparatus for hybrid coding of speech having phase alignment between mode-switched frames. Gersho

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et al. is relied upon as teaching encoding of speech that provides a determination of frequency and amplitude information. The frequency and amplitude information is transmitted through a combination of a multiplexer (#48, FIG. 4A) and a de-multiplexer (#102, FIG. 5). As clearly set forth by Gersho et al. at col. 14, ln. 59-67,

Since *no phase information is sent* from the encoder to the decoder, phase synchronization is based solely on the reconstructed speech (at the decoder) and the reconstructed speech and the original speech (at the encoder). ... The decoder uses the estimated linear phase for the reconstruction of the speech....

In order to avoid transmission of phase information, "onset synchronization is performed at the speech decoder" (col. 16, ln. 5-7) and then the initial linear phase "propagates from the first frame of the harmonic segment to the following frames by the phase evolution described in Eq. (4) or Eq. (6).

Gersho et al. sets forth at col. 15, ln. 20-22 that "initial linear phase of the harmonic segment, $\theta_{0.0}$, is required to provide signal continuity *but additional bits would be needed for its transmission.*" In other words, Gersho et al. teaches away from even transmitting an initial linear phase of a harmonic segment due to the requirement of additional bits. A key word search of Gersho et al. reveals the word "jitter" at col. 19, ln. 11, however this "jitter" refers to classification jitter in a neural network and not the claimed jitter parameter. Gersho et al. is simply devoid of transmission or reception of a phase jitter parameter as claimed.

McAulay et al. is relied upon in the Office Action as teaching transmission of explicit phase parameters. See Office Action at page 3, ln. 1. However, none of the phase parameters of McAulay et al. are a "phase jitter parameter" as claimed. According to McAulay et al., "homomorphic methods are used to estimate and remove the system phase to create the sine-wave representation of the [well known] glottal excitation waveform." McAulay et al. at col. 8, ln. 28-37. Of course, the synthetic model is not perfect, hence "for good synthetic speech, it is *necessary* to code the residuals." Id.

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Thus, McAulay et al. provides a predictive model, codes the residuals, and then transmits both for later decoding.

“Since the final decoded excitation phase is the phase predicted by the model *plus* the coded phase residual, ... and hence, will better preserve the pitch structure in the synthetic waveform.” Id. at col. 8, ln. 54-60.

This process is clearly illustrated at FIG. 5, wherein step 78 sets forth coding the time phase residuals, and then after transmission, step 82 sets forth computing a linear phase value and *adding* it to the phase residual. The Office Action characterizes the phase residuals of McAulay et al. as “explicit phase parameters.” See Office Action at page 3, ln. 1. However, the phase residuals of McAulay et al. (which are in reality left-over error products) are simply not phase jitter parameters as claimed.

With reference to the rejection of dependent claims 2, 3, 4, 5, 7, 8, 10, and 11, the Office Action inexplicably relies upon Gersho et al. as teaching “phase jitter” after stating with regard to claim 1 that the Gersho et al. parameters are not phase parameters.

Prima Facie Obviousness

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In short, all claim limitations are neither taught nor suggested. The Office Action confirms that Gersho et al. does not teach phase parameters at page 2, last 4 lines.

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McAulay et al. is relied upon as teaching "explicit phase parameters" -- which are really residual phase parameters that are left over from coding with the predictive model.

The present invention relates to a phase jitter parameter. Claim 1 transmits a phase jitter parameter, claim 5 receives a phase jitter parameter, claim 6 has means for transmitting a phase jitter parameter, claim 7 has means for receiving a phase jitter parameter, and claim 9 has a signal comprising a phase jitter parameter. The present invention provides the phase jitter parameter so that, *inter alia*, all required information is available at an early stage in the decoding. The applied prior art simply fails to teach a phase jitter parameter and fails to teach the parameter as claimed.

There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings as suggested in the Office Action. In short, Gersho et al. expressly teaches that *no phase information is sent*. McAulay et al. teaches *sending residual phase information*. One skilled in the art would not modify a reference teaching away from sending phase information with a reference teaching sending of residual phase information. The references may not be combined for want of motivation.

While we believe that the instant pre-appeal brief places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner telephone the undersigned attorney in order to expeditiously resolve any outstanding issues.

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